Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2, 15, 18 and Other	)	ET Docket No. 97-94
Parts of the Commission's Rules to Simplify	)	
and Streamline the Equipment Authorization	)	
Process for Radio Frequency Equipment	)	

REPORT AND ORDER
(Proceeding Terminated)

Adopted: April 2, 1998 **Released: April 16, 1998**

By the Commission: Commissioner Ness issuing a statement

I. INTRODUCTION

1. By this action, the Commission is amending Parts 2, 15, 18 and other parts of its rules to simplify the equipment authorization processes, deregulate the authorization requirements for certain types of equipment, and begin implementation of an electronic filing system for equipment authorization applications. These actions will greatly reduce the complexity and burden of the Commission's equipment authorization requirements so that products can be introduced to the market more rapidly. The number of applications required to be filed with the Commission will be reduced from about 3500 to approximately 1800[1] annually, significantly reducing paperwork requirements on manufacturers. The provision for electronic filing of applications should also substantially reduce the application processing time. We expect that this action will result in savings of at least $100 million to manufacturers of the products covered by the changes. We believe these actions will greatly benefit both large and small manufacturers and encourage the development of innovative products that best meet consumers' needs. We recognize that additional steps may be appropriate to further improve the efficiency and effectiveness of our equipment authorization program. We plan to adopt a Notice of Proposed Rule Making in the very near future to allow organizations other than the FCC to certify equipment. The notice will also propose to implement international mutual recognition agreements on testing and approval

[1] We currently receive slightly over 5000 applications annually. However, many of these are for personal computers and peripherals, where the filing of an application is voluntary. Only about 3500 of the applications filed each year are required.

of telecommunications and electronic products. These actions will reduce the burden of product approval processes domestically as well as internationally.

II. BACKGROUND

2. Section 302 of the Communications Act of 1934, as amended, authorizes the Commission to make reasonable regulations, consistent with the public interest, governing the interference potential of equipment which emits radio frequency energy.[2] The purpose of this section is to ensure that radio transmitters and other electronic devices meet certain standards to control interference before they reach the market. The Commission carries out its responsibilities under Section 302 in two ways. First, the Commission establishes technical regulations for transmitters and other equipment to minimize their potential for causing interference to radio services. Second, the Commission administers an authorization program to ensure that equipment reaching the market complies with the technical requirements. The authorization program requires that equipment be tested either by the manufacturer or at a private test laboratory to ensure that it complies with the technical requirements. For a large number of devices, once the equipment has been tested and found to comply, it may be marketed without any approval from the Commission. However, for certain equipment which poses a greater risk of interference, the Commission requires the submission of an application which must be reviewed and approved before the equipment can be marketed. The Commission may request a sample of a device to confirm it complies with the applicable technical requirements, but that is only done in a very small number of cases.

3. On March 13, 1997, the Commission adopted a *Notice of Proposed Rule Making* (*Notice*) in the above captioned proceeding.[3] The *Notice* proposed to amend Parts 2, 15, 18 and other rule parts to: 1) simplify our existing equipment authorization processes; 2) deregulate the equipment authorization requirements for certain types of equipment; and 3) provide for electronic filing of applications for equipment authorization. The proposals were designed to reduce the burden of the equipment authorization program on manufacturers.

4. A total of 18 parties filed comments, and 7 filed reply comments in this proceeding.[4] With one exception, the comments were highly supportive of the Commission's proposal. A list of parties submitting comments is contained in Appendix B. The parties generally supported the

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[2] *See* 47 U.S.C. § 302(a).

[3] *See Notice of Proposed Rule Making* in ET Docket 97-94, 12 FCC Rcd 8743 (1997).

[4] Rockwell Corporation (Rockwell) filed comments one day after the close of the comment period, along with a *Motion to Accept Late Filed Comments*. In the interest of obtaining a complete record in this proceeding, we are accepting Rockwell's comments. We do not believe this action will harm any other parties.

proposals contained in the *Notice* and suggested various modifications. Accordingly, we are adopting many of the proposed changes to simplify the authorization process and relax the equipment authorization requirements for certain devices, as well as making the rule changes necessary to implement an electronic filing system for applications.

III. DISCUSSION

Simplification of Existing Equipment Authorization Processes

5. There are currently five different equipment authorization procedures specified in Subpart J of Part 2 of the Commission's Rules.[5] The following is a brief description of each procedure:

> **Type acceptance** calls for the manufacturer or importer to submit a written application for review and approval by the Commission. The application must include a complete technical description of the product and a test report showing compliance with the technical requirements. The type acceptance procedure has traditionally been applied to radio transmitters that are used in authorized radio services, such as commercial and private mobile radio services.
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> **Certification** is similar to type acceptance. The manufacturer or importer must submit a written application that includes a technical description of the product and a test report showing compliance with the Commission's technical standards. Certification has traditionally been used for low power, unlicensed consumer devices that operate under Parts 15 and 18 of the rules.
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> **Notification** requires submittal of a written application, but no test report is required unless specifically requested by the Commission. Notification has been used for a variety of products that demonstrated a good record of compliance, but the Commission found it appropriate to maintain some degree of oversight.
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> **Declaration of Conformity (DoC)** is a relatively new self-approval procedure that was established in connection with the Commission's deregulation of the certification requirements for personal computer equipment.[6] The DoC procedure calls for the manufacturer or importer to test the equipment to determine compliance with the FCC standards. The laboratory performing the measurements must be accredited by either the National Institute of Standards and Technology (NIST) or the American Association for

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5 *See* 47 C.F.R. § 2.901, *et seq.*

6 *See Report and Order* in ET Docket No. 95-19, 11 FCC Rcd 17915 (1996).

Laboratory Accreditation (A2LA). A copy of the declaration of conformity, listing the party responsible for compliance, must be included in the literature furnished with the product.

Verification is also a manufacturer self-approval procedure, but unlike the DoC procedure does not require use of an accredited test laboratory and does not require a declaration of compliance to be supplied with the equipment. Verification has been used primarily for certain non-consumer devices operating under Parts 15 and 18 of the rules, such as business computers and industrial heating and welding equipment that use radio frequency energy.[7]

6. In order to reduce the complexity of having so many authorization procedures, we proposed to reduce the number to three, which we believe to be the minimum necessary for an effective program. Specifically, we proposed to eliminate the notification procedure, and to combine the type acceptance procedure with certification.[8] We proposed to retain the two self-authorization procedures, verification and declaration of conformity, although we requested comments on the possibility of combining them.[9]

Elimination of the Notification Procedure

7. Uniden, Motorola and Rockwell supported eliminating the notification procedure.[10] Uniden stated that no useful purpose exists for the continuation of this procedure, and devices currently subject to notification should be placed under verification or DoC.[11] Rockwell stated that deletion of the notification procedure would save manufacturers and the Commission valuable time and resources.[12] It argues that it would eliminate the cost of applications and decrease the time-to-market for products by eliminating the delays caused by submitting applications to the Commission.

8. The notification procedure requires the filing of an application form with the Commission, but it does not require the submittal of any measurement results. This procedure

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7 *See* 47 C.F.R. §§ 15.101 and 18.203.

8 *See Notice* at para. 8-10.

9 *Id.* at para. 12.

10 *See* Uniden Comments at 2; Motorola Comments at 17; and Rockwell Comments at 3.

11 *See* Uniden Comments at 2.

12 *See* Rockwell Comments at 3.

provides us with a record of the equipment being marketed, but we do not review any test data to confirm the compliance of the equipment. We do not believe that the benefits of the notification procedure outweigh the cost to manufacturers resulting from delays in getting their products to market. We also do not believe that processing notification applications is an efficient use of the Commission's resources. Accordingly, we are eliminating the notification procedure as proposed in the *Notice*. Equipment currently under the notification procedure will be placed in the less stringent DoC or verification procedure, as discussed below.

Combining of Type Acceptance and Certification

9. Uniden generally supported our proposal to combine the type acceptance procedure with the certification procedure.[13] Rockwell had some concerns about the organization of the combined rules and proposed its own version.[14] However, Motorola opposed our proposal. It stated that the marginal benefits from such an approach are unlikely to outweigh the potential for confusion from the change.[15]

10. As we stated in the *Notice*, the current certification and type acceptance procedures are very similar, in that both require the filing of an application form and technical report, and the filing procedure is the same for both.[16] The primary difference is that certain technical information filed with the application is different.[17] In light of this, we believe that it is more efficient to combine them into a single category. We understand Motorola's concern about making changes to procedures which have been in existence for a long time. However, we note that Motorola has a thorough understanding of the current system, which other parties may not, due to the large number of filings it has made with the Commission. As we have found in our dealings with the public, parties that are less familiar with the equipment authorization program frequently are confused by the multiple authorization procedures currently contained in the rules. Having a single procedure for equipment that must be authorized by the Commission will make the rules more understandable and thereby promote compliance. Moreover, we note that the term "certification" is generally used worldwide for a system requiring a third-party product approval. Accordingly, we are simplifying the rules by combining the type acceptance and certification

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[13] *See* Uniden Comments at 2.

[14] *See* Rockwell Comments at 7.

[15] *See* Motorola Comments at 16.

[16] *See Notice* at para. 8.

[17] For example, type acceptance typically requires information on a transmitter's power, type of emission, operating frequency stability, occupied bandwidth and spurious emissions. Certification typically requires information on a device's radiated emission levels and emissions coupled onto the AC power lines.

procedures into a single procedure called "certification". We have implemented the suggestions of Rockwell to clarify the rules.

Retention of Verification and Declaration of Conformity as Separate Processes

11. We requested comments in the *Notice* about the possibility of combining the Declaration of Conformity and verification procedures.[18] ITI, Ericsson, HP, Motorola, TIA and Rockwell all supported keeping separate verification and Declaration of Conformity (DoC) procedures.[19] NEMA supported replacing the verification procedure with DoC only if the procedure were simplified, and accredited labs are not required.[20]

12. We believe there is merit to retaining verification and DoC as separate procedures. Verification is clearly appropriate for equipment that has an excellent record of compliance, where the measurement methods are well known and understood, and where it is relatively easy to determine the party responsible for compliance. The Declaration of Conformity procedure provides added safeguards that are necessary to ensure compliance for certain products that have a greater potential for causing interference or where issues about the proper measurement method may arise. Manufacturers support the availability of two different self-approval procedures that can be applied as appropriate to particular classes of equipment. Accordingly, we are making no changes to the verification and DoC procedures.

Relaxation of the Equipment Authorization Requirements for Certain Devices

13. In the *Notice*, we proposed to deregulate the equipment authorization requirements for certain devices. Specifically, we proposed to relax the requirements for certain Part 15 unintentional radiators from certification or notification to the Declaration of Conformity (DoC) procedure.[21] We also proposed to relax the requirements for Part 18 consumer ISM (industrial, scientific and medical) equipment from certification to the DoC procedure, and to relax the requirements for certain other transmitters operating under Parts 5, 73, 74, 78, 80, 87 and 101 of the rules.[22]

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[18] *See Notice* at para. 12.

[19] *See* ITI Comments at 5; Ericsson Comments at 11; HP Comments at 2; Motorola Comments at 17; TIA Comments at 2; and Rockwell Comments at 4.

[20] *See* NEMA Comments at 2.

[21] *See Notice* at para. 18.

[22] *Id.*

14. The majority of comments supported the Commission's proposal to relax the authorization requirements for various devices. Some of the comments concerned specific devices, which will be discussed later. However, Metricom opposed increasing the number of devices subject to self-authorization.[23] Metricom stated that the proposals are contrary to the public interest and Congress' intent in Section 302(a) of the Communications Act of 1934, as amended (the "Act").[24] It states that prior Commission review of applications remains essential to preventing harmful interference from equipment that does not strictly adhere to the Commission's Rules. Metricom also states that the Commission should not remove itself from the equipment authorization process because manufacturers are often confused as to the requirements and procedures to which they must adhere.

15. Section 302(a) of the Act states, "*The Commission may, consistent with the public interest, convenience, and necessity, make reasonable regulations . . . governing the interference potential of devices which in their operation are capable of emitting radio frequency energy . . . in sufficient degree to cause harmful interference to radio communications . . .*"[25] Section 302(a) of the Act is not intended to require a Commission approval for every type of radio frequency equipment before it can be imported or marketed in the United States. Rather, it gives the Commission authority to make reasonable regulations governing the interference potential or radio frequency devices, consistent with the public interest. We believe that the public interest is best served by eliminating the unnecessary delays and higher costs of marketing equipment caused by overly burdensome regulations. Manufacturers' self approval for certain equipment is an appropriate way of controlling interference without overly burdening manufacturers. Finally, we note that the *Notice* did not propose to change the technical standards governing radio frequency devices; only the methods of authorizing certain devices.

Part 15 devices

16. The current Part 15 rules require TV interface devices and certain receivers to be authorized through the certification procedure.[26] Other receivers and Cable System Terminal Devices (CSTDs) are required to be authorized through the notification procedure.[27] The *Notice* proposed to change the authorization requirement for TV interface devices and receivers, except

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[23] *See* Metricom Comments at 3.

[24] *See* 47 U.S.C. § 302(a).

[25] Id.

[26] CB receivers, superregenerative receivers and scanning receivers are required to be authorized through the certification procedure. *See* 47 C.F.R. § 15.101(a).

[27] *Id.*

scanning receivers, to DoC.[28] The *Notice* also proposed to change the authorization requirement for CSTDs from notification to certification. Comments received in response to the *Notice* reflected wide-ranging views on the issues presented.[29]

17. VCRs and many receivers are widely deployed, mass-marketed consumer devices. VCRs that do not comply with the technical standards have the potential for causing interference to television reception, because they generate a signal on television frequencies. In addition, we have occasionally found receivers on the market that do not comply with the rules. We note that both VCRs and receivers require measurements of radio emissions that require considerable skill. For these reasons, we believe that the authorization process for VCRs and receivers should be relaxed to the DoC procedure, rather than verification. However, for the time being we will continue to allow receivers that are contained in a transceiver subject to certification to be authorized under the verification procedure.[30] We will for now also provide the option of obtaining a grant of certification for VCRs and receivers.[31] Any laboratory accredited to perform DoC testing of personal computers and peripherals may perform DoC testing of VCRs and receivers, since the ANSI C63.4-1992 measurement procedure is used for testing all of these devices.[32] We note that there are already many laboratories accredited to perform such testing.

18. The *Notice* proposed to tighten the authorization requirement for CSTDs from notification to certification. We proposed that action in recognition of the fact that there is a large market for "pirate" cable boxes, which allow the viewing of scrambled cable channels without payment to the cable provider. In its comments, Time Warner agreed with the Commission's proposal, and requested that we impose special requirements for applications for

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[28] *See Notice* at para. 18.

[29] Ford agreed with our proposal to authorize superregenerative receivers through the DoC procedure (page 2). Rockwell requested that we place all other receivers under verification, rather than DoC (page 6). AMP agreed with our proposal to place TV interface devices under DoC (page 6), while CEMA requested that we place them under verification instead (page 3). Time Warner requested that we adopt additional authorization requirements for CSTDs to prevent cable theft (page 9).

[30] *See* 47 C.F.R. § 15.101(b).

[31] Many Part 15 receivers are currently required to receive a grant of notification. *See* 47 C.F.R. § 15.101(a). However, since we are eliminating the notification procedure, parties that wish to receive an optional approval must obtain certification.

[32] The ANSI C63.4-1992 measurement procedure is used for testing most Part 15 intentional and unintentional radiators. *See* 47 C.F.R. § 15.31(a)(6). Laboratories are accredited to test devices in accordance with the ANSI C63.4-1992 procedure.

CSTDs.[33] Specifically, Time Warner requested that 1) applicants detail the features designed to prevent unauthorized reception of programming, 2) applicants detail the steps to ensure the distribution by legitimate distributors only, 3) CSTD grants not become final for 60 days after the public notice of grant, 4) parties who have engaged in theft of service within the past ten years be denied FCC authorization, and 5) the Commission establish an expedited procedure to revoke CSTD authorizations for parties who have engaged in theft of service. In their reply comments, NCTA and NextLevel generally agreed with Time Warner, although they objected to the 60 day period for grants to become final and expressed concern that a requirement to describe the features designed to prevent unauthorized reception of programming could require revealing proprietary information.[34]

19. While we recognize that cable signal theft is a serious concern, upon review we believe that attempts to address this problem through our equipment authorization program would likely create substantial administrative burdens and delays in the availability of cable system terminal devices. For example, additional time and resources would be required to review the design of equipment to ensure that it includes features to prevent unauthorized reception of programming. We would need to investigate the planned distribution of the equipment and whether the applicant has been involved in criminal activity. Further, we would need to take administrative actions such as setting aside or revoking grants of equipment authorization. At the same time, it is not clear that such actions would have any significant effect on cable theft. Parties intending to distribute such equipment would simply not apply for equipment authorization or simply misrepresent the equipment in their applications. We believe that our proper focus with regard to CSTDs should be on compliance with our radio emissions standards. Accordingly, we are relaxing the equipment authorization requirement for CSTDs to the DoC procedure, consistent with the requirements for receivers and VCRs.

Part 18 devices

20. The *Notice* proposed to change the authorization requirement for Part 18 consumer ISM (industrial, scientific, medical) equipment from certification to DoC.[35] NEMA and GE both supported this change.[36] However, GE opposed the requirement to include a compliance statement with radio frequency (RF) light bulbs, arguing that there is usually no package insert, there is no room to include a compliance statement on the package, and no problems have arisen

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[33] *See* Time Warner comments at 8-10.

[34] *See* NCTA Reply Comments at 3-4; and NextLevel Reply Comments at 4-9.

[35] *See Notice* at para. 18(b).

[36] *See* GE Comments at 3; and NEMA Comments at 2.

from a lack of this information in the past.[37] NEMA requested that the compliance statements be short and that manufacturers be allowed to print them on the package.[38] NEMA also requested that we consider modifying or deleting the requirements for information to the user contained in Section 18.213.[39]

21. Part 18 consumer ISM equipment has had a reasonably good record of compliance with the FCC requirements. However, these devices could easily cause interference if they did not conform with our standards because significant radio energy can be radiated into the airwaves. We also note that the measurement of radio emissions from these products requires considerable skill. We believe that relaxing the authorization requirement to the DoC procedure is appropriate, because it relieves manufacturers of the burden of obtaining an approval, but still provides a degree of certainty that the equipment will comply with the standards. We will, for now, allow the option of obtaining certification. We recognize that there are currently no laboratories accredited specifically for Part 18 testing, but we are working with the appropriate organizations to establish such accreditation provisions.[40] We note that there are certain similarities between Part 15 and Part 18 compliance testing.[41] Therefore, until such time as an accreditation procedure is established for Part 18 testing, we will accept measurement results from a laboratory accredited for Part 15 testing for the purpose of a Part 18 DoC.

22. We believe that a compliance statement and a label are necessary to allow identification of equipment that has been tested for compliance, and for identification of the responsible party. Accordingly, we are adopting a requirement for a short compliance statement and simple label on the device. We will require Part 18 equipment authorized under the DoC procedure to be labelled with the FCC logo, as we currently require for Part 15 equipment

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37 *See* GE Comments at 3-5.

38 *See* NEMA Comments at 3.

39 *Id.* at 4.

40 47 C.F.R. § 2.948(d) requires Declaration of Conformity testing to be performed at an accredited laboratory. Two organizations that accredit laboratories for such testing are the National Institute of Standards and Technology (NIST) through the National Voluntary Laboratory Accreditation Program (NVLAP), and the American Association for Laboratory Accreditation (A2LA). The laboratory accreditations recognized by the Commission currently only cover the testing of equipment operating under Part 15 of the rules, but we have been working with NIST and A2LA to expand the scope to cover the testing of equipment operating under other rule parts.

41 Parts 15 and 18 both require radiated and/or line conducted measurements for various devices. A facility which can test Part 15 devices should be able to test most Part 18 consumer devices, such as RF light bulbs, ultrasonic cleaners and microwave ovens.

authorized under the DoC procedure.[42] The FCC logo was selected to be a recognizable indicator that the device complies with the FCC standards, similar to the use of the "UL" logo to show compliance with Underwriters Laboratory standards, or the "CE" logo to indicate compliance with European standards. We decline to change the requirements contained in Section 18.213 since they serve a useful purpose in informing users of the interference potential of the device and any maintenance that may be required for continued compliance with the rules. Finally, we are taking this opportunity to remove the provisions of Section 18.205 requiring the filing of a description of the measurement facility used for testing Part 18 equipment. This is merely an editorial change, because Section 2.948 already requires the same information.[43]

Licensed transmitters

23. In the Notice, we proposed to change the authorization procedure from notification to either verification or DoC for transmitters operating in licensed services as listed:[44]

- wildlife tracking and ocean buoys operating under Part 5
- Part 101 point-to-point microwave transmitters
- Part 73 AM transmitters, FM transmitters, television transmitters, and antenna phase monitors
- Part 74 Auxiliary Broadcast aural STLs, aural intercity relays, aural STL boosters, aural intercity relay boosters, TV STLs, TV intercity relays, TV translator relays and TV microwave boosters
- Part 78 Cable Television Relay fixed transmitters
- Part 80 INMARSAT equipment
- Part 87 406 MHz emergency locator transmitters

24. Uniden agreed with the proposed changes.[45] Alcatel and the Section agreed with the proposal to move Part 101 fixed service microwave transmitters from notification to DoC, but objected to the requirement to use an accredited laboratory.[46] We did not receive any other specific comments on these proposed changes.

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42 *See* 47 C.F.R. § 15.19.

43 *See* 47 C.F.R. §§ 18.205 and 2.948.

44 *See Notice* at para. 18.

45 *See* Uniden Comments at 5.

46 *See* Alcatel Comments at 2; Section Comments at 3; Alcatel Reply Comments at 2; and Section Reply Comments at 3.

25. We continue to believe that the authorization requirements for these transmitters may be relaxed, due to the excellent record of compliance compiled thus far. While we initially proposed DoC for certain Part 74 , 78 and 101 transmitters in the *Notice*, we now believe that verification would be more appropriate. These transmitters are operated under the terms of a license. Therefore, we can locate and contact a licensee to resolve any interference problems that may develop. In addition, there is currently no laboratory accreditation program for laboratories testing Part 74, 78 and 101 transmitters. Because, the measurements required for these transmitters are significantly different from those required for Part 15 equipment, it would not be reasonable to require a Part 15 accredited laboratory to perform the measurements. Changing the authorization requirement to DoC for these transmitters would therefore be of no benefit until such time as a laboratory accreditation program for them is established. Moreover, we believe that the manufacturers of these transmitters are capable of performing the necessary measurements to ensure compliance of the equipment. Therefore, we are eliminating the notification requirement for all transmitters on the list delineated above, including those under Parts 74, 78 and 101, and replacing it with a verification requirement. We will continue to monitor the compliance of this equipment, and may revisit our decision to eliminate the authorization requirements if significant compliance problems develop.

Authorization changes for other devices

26. In the *Notice*, we requested comments on whether there are other devices not covered above for which the authorization requirements could be relaxed. Motorola requested that we move Family Radio Service transmitters operating under Part 95 from certification to DoC, because the equipment is low powered and is based on established designs.[47] The Family Radio Service is a relatively new service, established only in 1996.[48] We do not feel that there has been sufficient time to demonstrate a history of compliance which would warrant relaxing the authorization requirements for the equipment used in the service. Accordingly, we decline to place Family Radio Service transmitters under DoC at this time.

27. Ericsson requested that Part 22 and Part 90 analog base stations be subject to verification, and that Part 22 and Part 90 analog mobile equipment be subject to DoC since the test procedures are widely known and the equipment has an excellent record of compliance.[49] We have concerns about deregulating the equipment authorization requirements for Part 22 and Part 90 transmitters due to the need to ensure compliance with recent changes to the technical

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[47] *See* Motorola Comments at 19.

[48] *See Amendment of Part 95 of the Commission's Rules to Establish a Very Short Distance Two-way Voice Radio Service*, 11 FCC Rcd 12977 (1996).

[49] *See* Ericsson Comments at 5.

rules. For example, Part 90 equipment is subject to new technical requirements as a result of spectrum refarming.[50] Also, certain Part 22 and Part 90 mobile and portable transmitters are subject to recently adopted requirements for routine evaluation for RF exposure.[51] We therefore do not believe that verification is appropriate for the base stations, nor do we believe DoC is appropriate for the mobile stations. However, we will monitor the situation and, if appropriate, will consider relaxing the equipment authorization requirements for the aforementioned equipment in the future.

28. Ford suggested that we move remote keyless entry and passive antitheft devices from certification to DoC since there is a long and successful history of compliance.[52] However,we have concerns about keyless entry transmitters used on automobiles. They are widely deployed, and therefore have a high potential for causing interference if they do not comply with the technical standards. While we do not believe it is appropriate to relax the authorization requirements for keyless entry and passive antitheft devices at this time, we will reevaluate this finding in the future.

Electronic Filing

29. The *Notice* proposed that the Commission adopt an electronic filing system for equipment authorization applications. Uniden, ITI, Metricom, Ericsson, Motorola, TIA and Rockwell all supported the concept, but had some concerns about its implementation.[53] Ericsson, TIA and Rockwell expressed concern about the amount of data that would have to be transmitted for one application.[54] Several parties were also concerned about how the confidentiality of filings could be maintained, and whether the Commission would mandate electronic filing, which could be a burden for some parties.

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[50] *See Second Report and Order* in WT Docket 92-235, adopted February 20, 1997, 62 FR 18834.

[51] *See* 47 C.F.R. § 1.1307(b)(2).

[52] *See* Ford Comments at 2.

[53] *See* Uniden Comments at 6; ITI Comments at 8; Metricom Comments at 6; Ericsson Comments at 5; Motorola Comments at 9; TIA Comments at 3; and Rockwell Comments at 10.

[54] *See* Ericsson Comments at 6; TIA Comments at 3; and Rockwell Comments at 9.

30. We believe that the implementation of an electronic filing system will significantly reduce the processing time of equipment authorization applications.[55] Such a system will eliminate the delays associated with filing applications in Pittsburgh, transporting them to the FCC Laboratory and manually logging them in. Also, an electronic system will allow parallel processing of applications, so the administrative and technical reviews can be done simultaneously, thus further reducing the processing time.

31. The Commission has hired a contractor to do the programming of the electronic filing system. Testing of the system began in March, 1998, and we expect that it will soon be fully operational.[56] We have worked closely with industry to resolve the concerns about confidentiality and the amount of data required for each application. We have determined that the data required for applications can be transmitted in an acceptable time using a modem, and in a significantly shorter time if a higher speed Internet connection is employed.[57] The system will use the Secure Socket Layer (SSL) protocol to encrypt the data transmitted over the Internet.[58] Information on pending applications can only be accessed over the Internet when the FCC ID and the application submission number, provided to the applicant at the time of filing, are known. The exhibits to applications, such as photographs and manuals, can only be accessed by personnel inside the FCC. Exhibits that are marked as confidential can only be accessed by the application processing staff. We believe these features adequately address the confidentiality concerns raised by the industry.

32. The system will be initially designed to handle both paper and electronic filings. However, we believe that permanently maintaining a dual processing system for both paper and electronically filed applications would be inefficient. The extra time required to process paper applications would offset some of the speed gains resulting from implementing the electronic filing system. We do not believe it is an undue burden on applicants to require applications to

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[55] The Commission is currently developing electronic filing systems to speed the processing of other types of applications. For example, the Commission's Wireless Telecommunications Bureau is developing the Universal Licensing System to replace ten existing wireless license processing systems.

[56] *See* Public Notice, "OET Prototype Electronic Form 731", released February 27, 1998.

[57] Preliminary tests on the electronic filing system show that a megabyte of data can be transmitted in 4 to 5 minutes using a 28.8 kilobit per second modem. Other types of Internet connections allow for a significantly faster data transfer. We expect that companies that frequently file applications will have access to the faster connections or can readily contract with others (e.g., equipment testing laboratories) who have them.

[58] The Secure Socket Layer protocol is built into widely used Internet browser software. It provides for 40 bit encryption for data transmitted from outside of the United States, and 128 bit encryption for data transmitted from inside the United States. The difference in the number of bits is due to restrictions on the export of encryption software from the United States.

be filed electronically, because the equipment required to do so is widely available.[59] Accordingly, we will require all equipment authorization applications to be filed electronically one year after the effective date of these rules. Prior to that date, we will accept both paper and electronically filed applications while manufacturers become familiar with the new system. We will be amenable to consideration of waiver requests from small businesses that find it a hardship to file applications electronically. As proposed in the *Notice*, we are adding a new paragraph to Section 2.911 indicating that the electronic equivalent of a signature will be accepted in electronically filed applications.

IV. OTHER MATTERS

Filing fees

33. In the *Notice*, we proposed to keep the filing fee for equipment used in licensed services at $450, while the fee for all other certified equipment under Parts 15 and 18 would remain at $895.[60] TIA agreed with this fee structure.[61] However, in its reply comments, NextLevel objected to the fee increase that would apply to Cable System Terminal Devices (CSTDs) if they were placed under certification.[62] NextLevel recommended a flat fee of $450 for all equipment subject to certification.

34. The filing fees for equipment are set at a level based upon the amount of time that is necessary to review applications. Applications for certification of equipment under Parts 15 and 18 often require greater review time in comparison to applications for equipment under other rule parts. Consequently, there is a higher fee for those applications. As noted above, we have declined to require certification for CSTDs, so NextLevel's concern about the application fee for these devices is now moot. We see no reason to change the current fee of $450 for transmitters used in licensed services. Accordingly, we will set the filing fees as proposed in the *Notice*.

Radio equipment list

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[59] The equipment required would typically consist of a personal computer with a modem or other connection to the Internet, a document scanner, a digital camera, and software to convert the data to the proper format. We believe that the majority of manufacturers that will file applications with the Commission have most or all of these items already, or can readily contract with others (e.g., equipment testing laboratories) who have them.

[60] *See Notice* at para. 14.

[61] *See* TIA Comments at 3.

[62] *See* NextLevel Comments at 11. CSTDs have been subject to notification, which required a filing fee of $140. By moving CSTDs to certification, the fee will increase to $895. *See* 47 C.F.R. § 1.1103.

35. The *Notice* proposed to eliminate the Radio Equipment List, since the information in the list is available through other sources. Uniden supported the proposal.[63] Section and Alcatel supported it, provided the Commission does not make any changes to the frequency coordination procedures in Section 101.103(d)(2)(ii).[64] However, Metricom opposed the elimination of the Radio Equipment List because that would make it more difficult to locate the manufacturer of interference-causing equipment.[65]

36. Information on transmitters that have been approved is available electronically from the FCC Internet site and the Public Access Link (PAL) system.[66] In addition, inquiries can be made by telephone to the "status desk" at the Commission's Laboratory.[67] The Commission also releases monthly Public Notices announcing the grants of applications. Because this information is available from various sources, we do not see a need to continue the Radio Equipment List. We disagree with Metricom that elimination of the list will make it more difficult to locate the manufacturer of equipment which has caused interference, since the information is readily available. We are not making any changes to Section 101.103(d)(2)(ii) of the rules, which addresses the concerns of the Section and Alcatel.

Submission of samples

37. Parties marketing equipment are required to supply a sample to the Commission for testing within 60 days of a request by the Commission. However, in cases involving harmful interference or safety of life, a sample must be supplied within 14 days.[68] The *Notice* proposed to decrease the time limit to 14 days in all cases, and to require parties to supply a voucher which the Commission could use to obtain a sample at a retail outlet.[69]

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[63] *See* Uniden Comments at 3.

[64] *See* Alcatel Comments at 2; and Section Comments at 3.

[65] *See* Metricom Comments at 5.

[66] The database of granted equipment authorization applications can be accessed on the FCC Internet site. The URL (address) is http://www.fcc.gov. The PAL system can be accessed with a computer and modem, and allows users to determine if a piece of equipment has been approved by the Commission when the FCC identification number is known. The telephone number for the PAL system is 301-725-1072.

[67] The telephone number for the FCC Laboratory is 301-725-1585.

[68] *See* 47 C.F.R. § 2.946.

[69] *See Notice* at 15.

38. Motorola and Metricom supported a 14 day time limit. Metricom stated it would reduce the time noncomplying equipment is in the marketplace.[70] NEMA and Uniden also supported a 14 day time limit, provided flexibility is given in the event there is difficulty meeting the deadline.[71] However, ITI and CEMA opposed the 14 day limit. CEMA stated that 60 days is not unreasonable, since a sample may not be in production, and it may take significantly longer than 14 days to locate, retrieve and provide a sample to the FCC.[72] ITI stated that 60 days is too long, but 14 days is not enough since in larger companies the group which receives the sample request may not be the same one which is responsible for providing the sample. ITI therefore recommends a 30 day time limit.[73] Motorola objected to the proposed requirement to supply vouchers for obtaining samples. It believes that retailers will be reluctant to honor a form of voucher which is rarely seen. As an alternative, Motorola suggests adding a requirement that grantees of equipment authorizations must reimburse the Commission for purchases of a certain number of samples within a certain time period after issuance of a grant.[74]

39. We believe that 60 days, or even 30 days, is more time than necessary for supplying a sample in most cases, and could therefore result in noncompliant equipment remaining on the market for a longer period of time. Accordingly, we are adopting a 14 day time limit for supplying test samples to the Commission as proposed in the *Notice*. We recognize that 14 days may not be sufficient in some cases when there are difficulties in supplying a sample. We will continue to consider extensions of time upon submission of a showing of good cause in those cases, as the rules currently allow.[75] We decline to establish a procedure for vouchers or reimbursement of sample purchase costs at this time, due to the complexities involved.

Transfers of control

40. The *Notice* proposed to clarify the rules that apply to corporate mergers, buyouts and acquisitions involving grantees of equipment authorization.[76] We proposed to combine Sections 2.929, 2.934 and 2.935 of the rules to clarify when an equipment authorization may be assigned

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70 *See* Metricom comments at 5.

71 *See* NEMA comments at 4 and Uniden comments at 4.

72 *See* CEMA comments at 3.

73 *See* ITI comments at 7.

74 *See* Motorola comments at 12.

75 *See* 47 C.F.R. § 2.946(c).

76 *See Notice* at 16.

or transferred to another party, and when new applications must be filed. Motorola stated that the proposed rule is an improvement in cases involving the sale of a company's assets. However, Motorola objected to the note in the proposed rule requiring the filing of a new application when a second party manufactures its equipment under a different name. It stated that the change would impose a burden on licensing and manufacturing arrangements.[77]

41. Prior to 1989, the Commission's rules required the filing of a new application whenever a change was made to the trade name under which equipment is marketed. In 1989, the Commission eliminated that requirement.[78] However, it appears that Section 2.929 was inadvertently not updated at that time to reflect that change. We are adopting the revised rule on transfers and assignments proposed in the *Notice*, but we are eliminating the reference to filing a new application for name changes.

Transition provisions

42. The changes adopted here simplify and streamline the equipment authorization procedures. Since they are deregulatory in nature, only a short transition period is necessary. Accordingly, we are making the rules effective 90 (ninety) days after publication in the Federal Register. However, in order to allow manufacturers to obtain the maximum benefit from the changes, equipment may be authorized under the relaxed procedures (i.e. - Declaration of Conformity or verification) effective 60 (sixty) days after publication in the Federal Register.

V. ORDERING CLAUSES

43. Accordingly, IT IS ORDERED that Parts 0, 1, 2, 5, 15, 18, 21, 22, 24, 26, 73, 74, 78, 80, 87, 90, 95, 97 and 101 of the Commission's Rules and Regulations ARE AMENDED as specified in Appendix A effective 90 days after publication in the Federal Register. This action is taken pursuant to Sections 4(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), 303(r), 304 and 307.

44. IT IS FURTHER ORDERED that the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis in Appendix C, to the Chief Counsel for Advocacy of the Small Business Administration.

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[77] *See* Motorola comments at 18-19.

[78] *See Report and Order* in GEN Docket 87-212, 4 FCC Rcd 376 (1989).

45. For further information regarding this Report and Order, contact Hugh L. Van Tuyl, (202) 418-7506, or Julius P. Knapp, (202) 418-2468, Office of Engineering and Technology.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX A

FINAL RULES

Part 0 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 0 - COMMISSION ORGANIZATION

1. The authority citation for Part 0 continues to read as follows:

Authority: Secs. 5, 48 Stat. 1068, as amended; 47 U.S.C. 155.

2. Section 0.31, paragraph (j) is amended by changing the term "type approval and acceptance, and certification" to "approval".

3. Section 0.401, paragraph (a)(2) is amended by correcting the address to "Federal Communications Commission, Equipment Authorization Division, 7435 Oakland Mills Road, Columbia, MD 21046".

4. Section 0.406, paragraph (b)(3) is amended by changing the term "type acceptance and type approval" to "authorization".

5. Section 0.433 is deleted.

6. Section 0.453, paragraph (k) is amended by deleting the term "(Type accepted, type approved, certified and notified)".

7. Section 0.455, paragraph (e)(3) is amended by deleting the term "(type accepted, type approval, certification, or advance approval of subscription television systems)".

8. Section 0.457, paragraph (d)(1)(ii) is amended by deleting the term "(type accepted, type approval, certification, or advance approval of subscription television systems)".

Part 1 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 1 - PRACTICE AND PROCEDURE

9. The authority citation for Part 1 continues to read as follows:

Authority: 47 U.S.C. 154, 303, 503(b)(5); 5 U.S.C. 552 and 21 U.S.C. 853a, unless otherwise noted.

10. Section 1.77, paragraph (g) is amended by changing the term "type approval and type acceptance" to "certification", and correcting the reference "subpart F" to "subpart J".

11. Section 1.1103 is revised to read as follows:

Section 1.1103 *Schedule of charges for equipment authorization, experimental radio services, ship inspections and international telecommunications settlements.*

Action	FCC Form No.	Fee Amount	Payment Type Code	Address
1. Certification: a. Receivers (except TV and FM)	731	350	EEC	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
b. Devices under Parts 11, 15 and 18 (except receivers).	731	895	EGC	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
c. All other devices	731	450	EFT	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
d. Modifications and Class II Permissive Changes	731	45	EAC	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
e. Request for Confidentiality	731 or 159 & Corres.	130	EBC	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
2. Advance Approval for Subscription TV System	159 & Corres.	2,740	EIS	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
a. Request for Confidentiality	159 & Corres.	130	EBS	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315

Action	FCC Form No.	Fee Amount	Payment Type Code	Address
3. Assignment of Applicant Code a. New applicants for all application types except Subscription TV	159 & Corres.	45	EAG	Federal Communications Commission, Equipment Approval Services, P.O. Box 358315 Pittsburgh, PA 15251-5315
4. Experimental Radio Service a. New Station Authorization	442	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
b. Modification of Authorization	442	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
c. Renewal of Station Authorization	405	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
d. Assignment or Transfer of Control	702 or 703	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
e. Special Temporary Authority	159 & Corres.	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
f. Additional fee required for any of the above applications that request confidentiality	159 & Corres.	45	EAE	Federal Communications Commission, Equipment Approval Services, P.O. Box 358320 Pittsburgh, PA 15251-5320
5. Ship Inspections a. Passenger Vessel Under Title III, Part III	801	390	FCS	Federal Communications Commission, P.O. Box 358110 Pittsburgh, PA 15251-5110
b. Oceangoing Vessel Under Title III, Part II	801	755	FFS	Federal Communications Commission, P.O. Box 358110 Pittsburgh, PA 15251-5110
c. Vessels Under the Great Lakes Agreement	801	110	FDS	Federal Communications Commission, P.O. Box 358110 Pittsburgh, PA 15251-5110

Action	FCC Form No.	Fee Amount	Payment Type Code	Address
d. Vessels Under the Safety of Life at Sea (SOLAS) Convention	801	660	FES	Federal Communications Commission, P.O. Box 358110 Pittsburgh, PA 15251-5110
e. Temporary Waiver of Inspection	159 & Corres.	75	FBS	Federal Communications Commission, P.O. Box 358110 Pittsburgh, PA 15251-5110
6. International Telecommunications Settlements Administrative Fee for Collections (per line item)	99	2	IAT	Licensees will be billed.

Part 2 of Title 47 of the Code of Federal Regulations is amended as follows:

PART 2 - FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

12. The authority citation for Part 2 continues to read as follows:

AUTHORITY: Sections 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 154(i), 302, 303, 303(r), and 307, unless otherwise noted.

13. Section 2.803, paragraph (a)(1) is revised to read as follows:

Section 2.803 *Marketing of Radio Frequency Devices Prior to Equipment Authorization.*

(a) * * *

(1) In the case of a device subject to certification, such device has been authorized by the Commission in accordance with the rules in this chapter and is properly identified and labelled as required by § 2.925 and other relevant sections in this chapter; or

* * * * *

14. Section 2.901, paragraphs (a) is amended by changing the term "type acceptance, certification, registration or notification" to "certification or registration". Paragraph (b) is amended by changing the term "type acceptance, certification or notification" to "certification".

15. Section 2.904 is deleted.

16. Section 2.905 is deleted.

17. Section 2.907, paragraph (a) is revised to read as follows:

Section 2.907 *Certification*

(a) Certification is an equipment authorization issued by the Commission, based on representations and test data submitted by the applicant.

* * * * *

18. Section 2.911 is amended by adding a new paragraph (g) as follows:

Section 2.911 *Written application required*

* * * * *

(g) "Signed," as used in this section, means an original handwritten signature; however, the Office of Engineering and Technology may allow signature by any symbol executed or adopted by the applicant with the intent that such symbol be a signature, including symbols formed by computer-generated electronic impulses.

19. Section 2.913 is amended by revising paragraph (b) and addding a new paragraph (c) as follows:

Section 2.913 *Submittal of equipment authorization application or information to the Commission.*

(a) * * *

(b) Any information or equipment samples requested by the Commission pursuant to the provisions of subpart J of this part shall, unless otherwise directed, be submitted to the Federal

Communications Commission, Equipment Authorization Division, 7435 Oakland Mills Road, Columbia, Maryland 21046.

(c) Effective **[insert one year plus 90 days after publication in Federal Register]**, all applications for equipment authorization must be filed electronically. The Commission will be amenable to consideration of waiver requests from small businesses that find it a hardship to file applications electronically. Information on the procedures for electronically filing equipment authorization applications can be obtained from the address in paragraph (b) of this section.

20. Section 2.915, paragraphs (a) and (c) are revised to read as follows:

Section 2.915 *Grant of application*

(a) The Commission will grant an application for certification if it finds from an examination of the application and supporting data, or other matter which is may officially notice, that:

* * * * *

(c) Certification shall not attach to any equipment, nor shall any equipment authorization be deemed effective, until the application has been granted.

21. Section 2.924 is amended by deleting the reference to Section 2.1001(b)(1).

22. Section 2.929 is revised to read as follows:

Section 2.929 *Changes in Name, Address, Ownership or Control of Grantee*

(a) An equipment authorization issued by the Commission may not be assigned, exchanged or in any other way transferred to a second party, except as provided in this section.

(b) The grantee of an equipment authorization may license or otherwise authorize a second party to manufacture the equipment covered by the grant of the equipment authorization provided:

(1) The equipment manufactured by such second party bears the FCC Identifier as is set out in the grant of the equipment authorization.